



*GEMINI House in Toronto*

heart of U of T's downtown St. George campus, is to change that by developing and taking to market a cost-effective, low-energy design alternative for the building sector.

"Ontario homes account for about a third of the electricity used in the province, with heating and cooling accounting for over half of that," said Jenni Myllynen, Conservation Fund Manager with the OPA. "The GEMINI house project offers an exciting opportunity to demonstrate a design concept dramatically reducing energy consumption that's suitable for both new and older homes."

Known as Nested Thermal Envelope Design (NTED), the U of T-owned house has been renovated to create two zones within its newly insulated walls. One is the interior, or core, which contains the primary living space, such as bedrooms, the kitchen and dining room. The other is the exterior, or perimeter, containing the secondary areas, including the

*Read more on page 2*

## CONSERVATION: Zoning in on energy savings

It's part renovation, part science experiment.

With the help of a grant from the OPA's Conservation Fund, faculty and students of Ryerson University and the University of Toronto (U of T) have come together with a team of housing and design industry professionals to retrofit an 1870s single-family home.

Old homes are generally considered drafty relics difficult to make energy efficient. But the goal of GEMINI House, in the

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## McLeod, Jamieson honoured for service to Ontario

OPA Board members Lyn McLeod and Ron Jamieson have been awarded the Order of Ontario for their years of public service.

Ms. McLeod, who held political office for 33 years locally and provincially, served as Minister of Energy, Minister of Colleges and Universities, Minister of Natural Resources and leader of the Ontario Liberal Party.

Since retiring from politics in 2003, Ms. McLeod has brought her expertise and insight to numerous key public organizations, including the Health Council of Canada, the Ontario Health Quality Council, the University of Ontario Institute of Technology, the Thunder Bay Institute of Technology and Confederation College.

Mr. Jamieson, who rose to be Senior Vice-President, Aboriginal Banking, with BMO Financial Group, pursued economic development initiatives for Aboriginals across



*Lyn McLeod and Ron Jamieson*

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**Do you have any  
comments or inquiries  
about the Arc newsletter?**

Please send them to:  
[arcnews@powerauthority.on.ca](mailto:arcnews@powerauthority.on.ca)



For more information on the Conservation Fund,  
<http://www.powerauthority.on.ca/cfund>

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vestibule, guest bedroom and a home office.

In a typical house, there is just one zone, meaning everything is heated to the same temperature. But in GEMINI House – named for the astrological sign of the twins because of its dual personality – when weather is extreme outside, people have the option of living just within the core of the house at a comfortable thermostat setting while perimeter temperatures are maintained closer to those outdoors.

The heat – or, in summer, cool air – lost from the core is then moved back from the perimeter by a heat pump located between the two zones. Although the pump runs on electricity, it takes less energy to move heat than to generate it.

While the house will be monitored over the next year to determine its exact energy efficiency, modelling in recent weeks has shown the NTED design, along with triple-glazed windows and radiant floor heating will

yield electricity savings of about one-third compared to a similar-sized Ontario home.

The retrofit, which took about 10 months to complete, is part of the Conservation Fund's commitment to financially support projects aimed at creating a culture of conservation by enabling Ontario residents, businesses and institutions to cost-effectively reduce their demand for electricity. The fund provided a grant of \$200,000 to GEMINI House.

"This was a very unique project as it was a living lab," said Anne Macdonald, Director, Ancillary Services, at the U of T. "It was being prototyped every step of the way."

For more information on the Conservation Fund, please visit:

<http://www.powerauthority.on.ca/cfund>

For more information on GEMINI House, please visit:

<http://www.civil.engineering.utoronto.ca/research/building/science/gemini.htm>



## CONSERVATION

### Aboriginal communities invited to apply for energy-saving program

Applications are now being accepted for the second year of an innovative OPA program that will help First Nation communities reduce their electricity use.

In the first year of the **saveONenergy** ABORIGINAL CONSERVATION PROGRAM (ACP), 12 selected First Nation communities (including two remote reserves) participated. Now, all First Nation communities across Ontario are encouraged to apply and 16 communities will be selected to participate.

**Applications will be accepted until February 26.**

The ACP provides customized electricity conservation services designed to help communities reduce their electricity consumption in residential, institutional and commercial buildings. It also creates employment opportunities for managers, community coordinators, canvassers and energy auditors.

In its first year, the ACP delivered conservation workshops to Métis and urban Aboriginals to encourage their participation in conservation initiatives offered by local distribution companies.

Colin Andersen, CEO of the OPA, urged First Nation communities to apply.

"The first year of the program has gone very well," he said. "We hope First Nation communities across the province will take the opportunity to apply for the second year of the program as we continue to work closely with First Nations and Métis communities on conservation and energy efficiency."

For more information:

<http://aboriginalenergy.ca/aboriginal-conservation-program>

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Canada during a distinguished career in the financial services industry.

A member of the Mohawk Nation from the Six Nations Reserve near Brantford, Ontario, Mr. Jamieson has long been passionate and committed to that cause in both his professional and personal life. He is co-chair of the Canadian Council for Aboriginal Business and has served in a senior capacity on a number of organizations in economic development, energy, education and Aboriginal affairs.

Both Ms. McLeod and Mr. Jamieson are original members of the OPA Board, having served the agency since 2005.

In letters of congratulations, OPA Board Chair Jim Hinds and CEO Colin Andersen said Ms. McLeod and Mr. Jamieson join a select group as recipients of “Ontario’s most prestigious official honour.”

The Order of Ontario, which is awarded annually, recognizes current or former long-time residents of the province who have shown a high level of individual excellence and achievement in any field benefitting the people of Ontario or anywhere in the world.

Others honoured in the January 23 ceremony at the Ontario Legislature include: Canadian hockey hero Paul Henderson; movie director David Cronenberg; TV journalist Steve Paikin; Alvin Curling, the first black Canadian to hold a cabinet position in Ontario, and author Irving Abella. 

## CALL CENTRE ANSWERS THE ‘HOW DO I’ QUESTIONS



Left to right: Claire Willison, Shereen Hussain, Ilana Glazenberg

### *“How do I...?”*

By Tim Taylor

That’s the way thousands of people start their questions when they contact the OPA’s call centre. They are calling about conservation program opportunities, program eligibility, the microFIT program and a host of other topics and different interests – more than 100,000 times a year.

“Our call centre is an extension of the OPA,” said Claire Willison, who as Program Response Analyst/Coordinator in the OPA’s Communications division is responsible for the organization’s relationship with the centre.

“The call centre team is more than a typical contact centre,” she said. “Team members will spend as much time as needed to provide the answer or find the answer. They make the call a conversation rather than just a question and answer.”

Ms. Willison works closely with the call centre team, which is based in Markham, just north of Toronto. She visits regularly to brief the representatives on new program content and to keep stories current. She even has an on-site workstation.

To help its representatives deal with callers, the call centre prepares a “cheat sheet” – a précis of each program’s details, eligibility and frequently-asked questions – from information supplied by the OPA.

“It is very important for us to get the cheat sheet right and to keep it current,” said Shereen Hussain, one of two call-centre leads supervising the activities of 10 to 14 representatives. “It’s like juggling. Each call is different and the answers have to be at our fingertips.”

Each representative – the number has ballooned as high as 75 for new or high-profile programs -- handles about 60 calls a day for the OPA, according to Ms. Hussain.

*“I really love the contact with people,” she said. “There is no better feeling than helping people through what can be, for them, a stressful situation. And getting a heartfelt ‘thank you’ in return.”*

“There aren’t many people we can’t help,” she added. “And when we do get one, we work really hard, usually with Claire’s help, to make it right.”

The FSA Group, the centre’s operator, has been an OPA supplier for seven years. Ilana Glazenberg, director of the centre’s operations, said much has been learned in that time about what to do and how to do it.

“Our business is all about finding the right people — caring, thoughtful, bright, motivated people, who understand the interests of the OPA’s customers and can retain the complex and extensive information that your customers care about,” said Ms. Glazenberg. “There’s no checklist for choosing the team, it really is a gut feeling about how well they will relate to a lot of people all the time.”

### *Why a call centre?*

“This team of people saves the OPA a lot of in-house resources and if our customers need more from us, it helps focus the questions to improve our ability to respond,” said Ms. Willison. “It’s like having a very intelligent, very flexible team of people who go where the action is, when we need it.” 



## ENGAGEMENT

### Stakeholder group discusses energy future

**D**iscussion of Ontario's updated Long-Term Energy Plan (LTEP) dominated the first meeting of the OPA's new Stakeholder Advisory Committee (SAC).

The committee, which met on January 7, heard a presentation on the 2013 LTEP from Amir Shalaby, Vice President of Power System Planning and peppered OPA staff with questions and comments about generation, regional planning, transmission, conservation and future innovations in the electricity sector.

The SAC was established last year to provide a forum for the OPA to receive advice and recommendations from a diverse range of interests. It builds on other OPA outreach activities, including the Advisory Council on Conservation and the First Nation and Métis Advisory Group.

OPA Board Chair Jim Hinds welcomed the committee and said the OPA Board would listen closely to all comments.

"From my point of view and the point of view of my fellow directors, we're here to listen directly to stakeholder input – that is the purpose," he said. "We're not here to debate, we're not here to pass judgment. We get benefit from this forum by listening to conversation and questions."

SAC Chair Brian Bentz, CEO of the local distribution company PowerStream, said he hoped the SAC would improve the quality of decision making on policies from a strategic point of view.

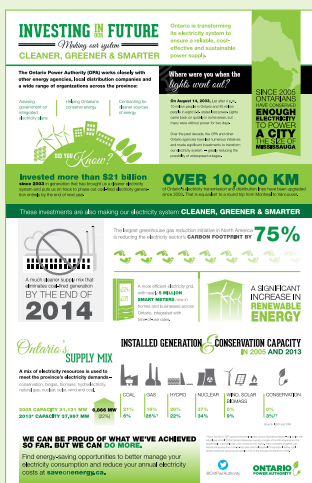
"It really, really is important to think at a strategic and high level," he said.

Five more SAC meetings are scheduled for 2014 with the next one on March 4.

SAC meetings are open to the public and can be accessed by webinar. For more information: <http://www.powerauthority.on.ca/stakeholder-engagement/stakeholder-advisory-committee>

## CONSERVATION

### Telling a story with graphics



**The OPA has produced another infographic to present complex information quickly and clearly. This one, *Investing in Our Future*, shows how Ontario is transforming its electricity system to ensure a reliable, cost-effective and sustainable power supply.**

**Click on the graphic to open the high-resolution PDF.**

## PLANNING

### OPA attention turning to LTEP implementation

**T**his promises to be a busy year for the OPA as attention turns toward implementing the 2013 Long-Term Energy Plan.

Soon after it was released on December 2, the government made clear how the OPA will continue to play a key role in the process, helping turn the vision of the document into the reality of the electricity system.

"I want to acknowledge your contribution to the significant progress we have made in building a reliable and clean energy system," Energy Minister Bob Chiarelli wrote in a December 17 letter to OPA Board Chair Jim Hinds and other Board members.

"I would also like to ensure your co-operation and commitment in implementing a number of initiatives identified in the 2013 Long-Term Energy Plan."

Things spelled out in the Minister's letter – and detailed in subsequent directives – that the OPA "will either lead or partner with the ministry to achieve," include:

- **Conservation First** – Ensuring conservation is considered first "in planning, approval and procurement processes," exploring the expansion of social benchmarking and encouraging municipalities and Aboriginal communities to develop their own conservation opportunities.
- **Renewable energy** – Achieve targets of 9,300 megawatts (MW) of hydroelectric generation by 2025 and 10,700 MW of non-hydroelectric renewable generation by 2021, develop and implement a new large renewable procurement (LRP) process and explore the potential of the microFIT program evolving into a net metering program.
- **Natural gas/Combined heat and power (CHP)** – Develop a procurement plan for CHP projects focusing on efficiency or regional capacity needs, targeting greenhouses, agri-food and district energy.
- **Rate mitigation and efficiencies** – Work with the government to enhance Stream 2 of the Industrial Electricity Incentive for further system benefits and economic development.
- **Enhanced regional planning** – Continue implementing recommendations of the joint OPA-Independent Electricity System Operator report on planning and siting of large energy projects.
- **Biomass** – Execute a contract with Ontario Power Generation for the procurement of electricity from advanced biomass at the Thunder Bay Generating Station by March 31, 2014.
- **Aboriginal engagement** – Ensure participation programs such as the FIT program for renewable energy and LRP provide opportunities for First Nation and Métis communities that reflect their unique circumstances, and launch the Aboriginal Transmission Fund in early 2014.
- **Energy innovation** – Collaborate with the IESO to study the value of energy storage and to develop a procurement process for up to 50 MW.
- **Nuclear refurbishment** – Ensure the seven principles of nuclear refurbishment are adhered to.

For more information on the LTEP, please see: <http://www.energy.gov.on.ca/en/ltep>



Derek Roldan assists visitors to the Ontario Science Centre

## CONSERVATION

### Spreading the word one person at a time

Nearly a dozen Ontario Power Authority staff spent some of their Christmas holidays on promoting energy conservation.

From December 23 to January 5, the OPA used its sponsorship of an exhibit at the Ontario Science Centre in Toronto to promote energy-saving tips and **saveONenergy FOR HOME programs**. An OPA booth was given a prominent position in the centre's Great Hall while signs and television monitors acknowledged the OPA as a sponsor of the exhibit, *Dream Machines: The Art of Rowland Emmet*.

The holiday break is the second-busiest time of the year for the centre. This year, there were more than 40,000 visitors, nearly half of them members of the Science Centre.

OPA staff interacted with about 9,000 people, giving out **coupon booklets**, **Kids Corner booklets on conservation**, kids' **saveONenergy** tattoos and postcards promoting the **saveONenergy AND BE REWARDED** campaign.

"It was great to see so many people interested in learning more about energy conservation and how they can save energy in their homes," said Derek Roldan, Marketing Specialist in Communications, who worked helped staff the booth.

Stephen Rouse, the OPA's Director of Marketing, said the holiday break event is likely to be the first of many partnerships with the Science Centre. He said the association is valuable because it offers the chance to speak to Ontarians – both children and adults – about energy conservation.

"In marketing, we so often speak to an imagined audience when creating campaigns so it was great to get a chance to dialogue in real time," he said. "Adults appreciated our energy-saving tips and the kids amazed us with their conservation knowledge."

Research shows that visitors to the Science Centre are a valuable demographic. More than 90 percent live in Ontario and about 87 percent are under the age of 44. Their average household income is \$92,500. Members are affluent and well-educated with an average household income of \$125,000 and 94 percent of the households include children and youth.

Mr. Rouse said the ability to reach a younger generation is key to sustaining energy conservation efforts. 🌱

## ANDERSEN NAMED CHAIR OF ENERGY COUNCIL OF CANADA

Colin Andersen, CEO of the OPA, has been appointed chair of the Energy Council of Canada (ECC).

His two-year appointment took effect on January 1.

The ECC is a vehicle for strategic thinking, collaboration and action by senior executives in the private and public sectors with a broad interest in national and global energy issues. It seeks to forge a better understanding of energy issues and to shape the energy sector for the benefit of all Canadians.

Its activities include sponsoring regional and national energy forums and conferences, advancing the energy dialogue in Canada, disseminating reports and contributing the development of energy policy. It was a founding member of the World Energy Council (WEC), which was established in 1923 and has more than 90 member nations.

The membership of the ECC is about 70 and is drawn from all corners of Canada's energy sector, including associations, corporations and government.

Mr. Andersen said he is looking forward to his new role and that he hopes a series of regional energy forums across Canada in 2014 will engage local energy communities on topics of immediate interest. This year, the regional forums kick off in Ottawa in March.

Among their key initiatives, the ECC engages in university-level energy policy research through the ECC Energy Policy Research Fellowship, a partnership with the University of Waterloo, as well as the Canadian Network for Energy Policy Research and Analysis (CNEPRA), in collaboration with the University of Calgary.

The ECC also recognizes leaders in Canada who have made a significant contribution to Canada's energy sector, both nationally and internationally, through the Canadian Energy Person of the Year award.

As well, Mr. Andersen said that this year will see Canada host the North America Region Energy Forum of the WEC. The forum, held in June, will focus on business opportunities on the continent and the latest developments in technology and policy in the energy industry. 🌱

For more information on the Energy Council of Canada, please visit: <http://www.energy.ca/users/folder.asp>